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SCOTTSDALE CITY COUNCIL

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**ADMINISTRATION OF A DECISION SUPPORT
SYSTEM GRANT FROM THE
URBAN CONSORTIUM**

The City Auditor evaluated the project results and internal controls related to an Advanced Technology Decision Support System grant. The grantor accepted project results, although the grant did not result in the expected operational system.

**Report No. 9802A
April 1999**



Most Honorable
U.S. District Judge of Maricopa

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CITY AUDITOR

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April 5, 1999

To the Most Honorable Sam Kathryn Campana, Mayor
and the Members of the Scottsdale City Council

Transmitted herewith is the report of our evaluation of project results and internal controls related to City of Scottsdale Advanced Technology *Administration of a Decision Support System Grant From the Urban Consortium*, Report No. 9802A. This work represents one segment of an Advanced Technology Grants audit that is an approved project on the City Auditor's 1997/98 Audit Plan.

The grantor accepted the results of the project, the City received all awarded funds, and the grant, thus, was closed. We believe that the project nonetheless did not deliver the software, operating decision support system, and measurement criteria that were promised to the City. This occurred for several reasons, including AT project management which did not appropriately control activities so that objectives were achieved. As well, we found that expenditure controls did not safeguard assets or promote efficiency and effectiveness, and that project managers did not always conform to requirements. We recommend that the Chief Information Officer direct development of policies and procedures that incorporate the Grants Administrative Guideline, related requirements such as the Purchasing Code, and specific project management procedures. The Chief Information Officer reviewed this report and submitted written responses that can be found in Appendix B.

If you need additional information or have any questions, please feel free to contact us at 312-7756.

Respectfully submitted,

A handwritten signature in cursive script, reading "Cheryl Barcala".

Cheryl Barcala, CIA, CPA, CFE, CGFM
Scottsdale City Auditor



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**Administration of a Decision Support System Grant
from the Urban Consortium
Report No. 9802A**

Action Plan.....	i
Executive Summary	1
Results In Brief	1
Background	2
Administration Of The UC/ETF Grant	6
Requirements Of UC/ETF Grant Were Completed.....	7
Controls Should Be Structured To Reasonably Assure Achievement Of Grant Deliverables	7
Internal Controls Should Be Adequate To Reasonably Assure Expenditures Conform To Requirements	10
RECOMMENDATIONS	15
ABBREVIATED RESPONSES	16
APPENDIX A - Objectives, Scope, And Methodology	17
APPENDIX B - Management Response.....	19

Administration of a Decision Support System Grant from the Urban Consortium
Report No. 9802A
Action Plan

No.	MANAGEMENT RESPONSE		IMPLEMENTATION STATUS		RECOMMENDATION(S)
	AGREE	DISAGREE	UNDERWAY	PLANNED	
1	X		X		<p>The Chief Information Officer should:</p> <p>Direct development of IS policies and procedures which incorporate the City guideline, related requirements such as the Purchasing Code, and the following project management procedures:</p> <ul style="list-style-type: none"> ▪ Allocation of resources to specific work products. ▪ Identification of staff qualifications needed. ▪ Development of staff time tracking methods. ▪ Inventory procedures to identify and track capital equipment purchased with grant funds. ▪ Establishment of periodic independent assessments of grant results and costs.

EXECUTIVE SUMMARY

In the mid-1990's, staff working in a program called Advanced Technology (AT) explored innovative uses of the geographic information potentially available from satellite technology. AT funding came from National Aeronautical and Space Administration (NASA) grants, and other sources. In the course of events, City managers became concerned about AT project administration. Because of these concerns, and for other reasons, management of Information Systems (IS), where the AT program was housed, restructured the program in 1997. The Program Director and other staff left the City, projects were closed, and expenditure controls were enhanced. The remaining staff working on AT projects were moved into the IS Geographic Information Systems (GIS) group.

An audit of the AT program was approved on the City Auditor's Fiscal Year 1997/98 audit plan. The audit is to determine whether or not AT staff complied with the terms and conditions of grants, and projects satisfactorily fulfilled the grants' objectives. As well, work is intended to formulate suggestions to IS management about improvements, which could strengthen internal controls over grant administration.

Because the AT program received funds from several grants, audit work was structured to report the results of each grant separately. This report discusses the Urban Consortium/Energy Task Force (UC/ETF) grant, a proposal to develop a Sustainable Decision Support System. Audit fieldwork on the UC/ETF grant was initiated in October and concluded in November 1998. Janet Lowden and Ramon Ramirez performed the work.

Results In Brief

UC/ETF and the City have concluded their relationship related to the grant. All of the \$74,200 grant funds awarded have been received, and of those funds, \$67,935 was applied to grant expenses. The final grant payment of \$6,240 was allocated to a clearing account, pending completion of our audit.

The UC/ETF project Sustainable Decision Support System was conceived of as an automated system to model the future effects of current development options for citizens and policymakers. "Sustainable" as a development criterion refers to the capacity "...to meet the needs of the present without compromising the ability of future generations to meet their own needs." The project, with an expected total budget of \$685,250, was to deliver software, an operating decision support system, and measures to gauge the effects of development on City sustainability, in

partnership with NASA, Arizona State University, and other federal and industry partners.

Although UC/ETF accepted results, we do not believe that the project delivered what was promised. Partly, this happened because the deliverables promised were innovative, and the timetable ambitious, considering the newness of the technology and the short grant period. Further, AT project management did not control progress toward achievement of the deliverables.

Also, we found that project management expenditure controls did not safeguard assets, or promote the efficient, effective use of City and grant resources. Although they were in positions of trust, project managers did not always conform to City and grantor expenditure requirements. Grant money is not administered through the City's normal budget and accounting processes, and we believe this contributed to the errors we found.

Financial Services has issued a City Administrative Guideline for Acquisition and Administration of Grants which outlines enhanced controls over grant projects, including identification of the total estimated project cost (grant and City funding), and pre-authorization of any required City resources. We recommend that the Chief Information Officer direct development of IS policies and procedures which incorporate this City guideline, related requirements such as the Purchasing Code, and the following project management procedures:

- Allocation of resources to specific work products.
- Identification of staff qualifications needed.
- Development of staff time tracking methods.
- Inventory procedures to identify and track capital equipment purchased with grant funds.
- Establishment of periodic independent assessments of grant results and costs.

Background

The AT mission was to identify potential projects that could use geographic information technology to enhance collaboration between citizens, staff, and policy makers. Public Technology, Inc. through the UC/ETF group, awarded one of the AT grants. According to documents we reviewed, AT staff submitted this proposal with the expectation that work necessary to complete the project would be done in tandem with other work already underway for existing NASA grants. The timeline for the grant ran from October 1, 1994, to December 31, 1995.

In general terms, the expected Sustainable Decision Support System would allow users to see visually and graphically the likely long-term results of current decisions. This would be accomplished by capturing data such as rainfall and vegetation patterns for the Earth, the US, and Arizona from the Internet, planes, and spacecraft. This "remote-sensed" data would then be merged with local information such as finances and development, and, with the press of a button, show planners, citizens, and officials what current decisions would likely look like many years from now.

The grant project encompassed three tasks. The first was to develop a system using commercially available software to access global, regional, and local environmental data by magnetic media or via the Internet, and integrate this into GIS. Task 2 was to develop a Decision Support System usable by City Council, senior staff, and citizen groups that would model outcomes of development choices. Task 3 was to develop sustainability indicators with which to measure City progress in enhancing sustainability.

The grant requirements included: 1) project reports had to be timely filed; 2) project managers had to attend two UC technical meetings; 3) expenditures had to comply with grant guidelines and relevant federal guidelines; and 4) the final report had to be accepted by UC reviewers. During the 1997 AT program restructure, IS staff determined that UC reviewers had not accepted the final grant report. IS staff revised it and UC subsequently approved it. The Insert below summarizes the primary contract requirements.

UC/ETF Grant Contract Requirements

Contractors shall:

- Comply with all US Department of Energy Regulations
- Comply with Chapter 1, Federal Procurement Regulations, Title 41, Public Contracts, Subpart 1-15.7—Grants and Contracts with State and Local Governments
- Comply with anti-kickback regulations, Title 18 US Code Sec. 874, and Title 40 US Code Sec. 276c
- Comply with all Equal Employment Opportunity regulations established by the US Department of Energy
- Prepare required formal reports timely
- Comply with all publishing and reporting requirements of the US Department of Energy
- Complete the UC/ETF Report Log of Activity
- Return the final revised report to Public Technology within two weeks of receipt of reviews
- Support billings by documents required by fiscal guidelines
- Expend funds in conformance to the budget

SOURCE: Agreement between the City of Chicago, for UC/ETF, and City of Scottsdale.

Funds were provided under a cost reimbursement agreement. The City had to incur expenses and then submit a request supported by expenditure documentation for reimbursement. About three-fourths of the \$74,200 provided through the UC/ETF grant was allocated to salaries, as shown in the Insert below. The source of "Other Share" funds budgeted in the project proposal was not identified.

Approximately 50 percent of the salary for the Project Director was charged to the grant. The Director's resume shows experience in managing public community development projects, in fund raising, and in environmental education, and he had developed the grant proposal. The Project Manager position on the grant was responsible for technical operations and system development. Approximately 50 percent of his salary was charged to the grant, as well. The first Project Manager assigned was a computer sales and customer support representative.

Authorized UC Project Budget			
Cost	Other Share	UC Budget	UC Use
Salaries	\$ 347,000	\$ 55,000	City staff salaries, for three people part-time
Fringe Benefits	\$ 25,882	None	
Consultants	None	\$ 8,000	Consultant to provide software integration and system design
Equipment Rental	\$ 165,000	\$ 6,000	Equipment rental of a notebook computer and electronic projector
Technical Meetings	None	\$ 3,200	Project Director and Project Manager travel to two UC technical meetings
Travel	None	\$ 2,000	Project Director trips (2) to Washington, DC
Overhead	\$ 73,168	None	
TOTAL	\$ 611,050	\$ 74,200	

SOURCE: Agreement between the City of Chicago, for UC/ETF, and City of Scottsdale.

At some point in early 1995, the Project Manager position apparently was reassigned to a staff person from Community Development, whose expertise was in City planning and zoning. While project reports reflect the assignment, it does not appear that a revised personnel budget was provided to the UC budget office to formalize the reassignment. The salary associated with the initial manager continued to be charged to the grant, and the salary of the new manager was not.

The structure of management oversight changed during the grant's life. During the period October 1994 to December 1995, and the subsequent months until approval of the final report in September 1998, staff working on the grant reported at various times to an Assistant City Manager or to the Chief Information Officer.

Project activities discussed in project reports included prototype system demonstrations and staff travel. The Project Director contracted an outside consultant, CIESIN, to provide its proprietary software, integrate it with City-provided data, and demonstrate that the interactive use of geographic information was possible via a non-operational prototype system. One prototype demonstration took place in April 1995, for a fifth grade class hosting a visit by a NASA Administrator. The prototype also was presented at the International City Manager's Association conference in Denver, Colorado, in September 1995. Two other demonstrations took place in November 1995, one at a meeting of the UC Energy Unit in San Antonio, Texas, and the other during a meeting of the National League of Cities in Scottsdale.

According to project reports and interviews with former staff, the Project Director, the Project Manager, and the former project manager, traveled to Burlington, Vermont, in May 1995, and to San Antonio, Texas, in November 1995, to attend meetings of the UC group. In June 1995, the Project Director and the former project manager traveled to Washington, DC for meetings.

Administration Of The UC/ETF Grant

The availability of grant funds can have positive results. They may be used to supplement City funding to expand service levels. In other situations, grant funds may provide a means to accomplish a service that was postponed due to the lack of funds. Or, grant funds may be used to experiment with innovations with the potential for better delivery of services.

Acceptance of grant funding can also present unique problems. Grant deliverables may not relate closely to the City's core services. Without adequate up-front review of needed resources, the City may find it needs to commit funds or staff to the grant project that it did not plan for. In addition, staff may believe that expenditures do not require the same level of accountability that City funds require.

The UC/ETF grant project produced some positive results, but also encountered some problems. Work conducted as part of the grant resulted in an increase in the level of discussion about sustainability by citizens and staff. The demonstration projects enhanced awareness about the potential uses of remote-sensed data. On the other hand, we found that cost-control procedures required by the City and the grantor were not in place, and funds were not spent prudently. For example, travel arrangements were costly, and non-competitive contracts avoided the City's process of ensuring the best price was obtained. When expenses exceeded the grant budget, costs were absorbed by other programs. The project did not produce the desired system. Instead, IS staff stated in the final grant report to UC that the project resulted in "a bunch of separate pieces and projects."

During exit conferences at the conclusion of our work, an Assistant City Manager and IS staff stated that IS has strengthened controls over its grants by refining project objectives for remaining AT grants, conforming to required administrative procedures, and supervising both technical quality and finances. We believe that these steps, as well as the implementation of new City policies and procedures governing grant solicitation and administration, will reduce the potential for problems with future IS grants.

The Administrative Guideline on Acquisition and Administration of Grants, effective in December 1998, seeks to establish better controls. A proposed grant's goals and key measurements and methodologies will be documented. The proposal will be reviewed independently by Financial Services for acceptability, and related City costs. Indirect costs that the City will incur after grant award will be estimated. Finally, grants will be

administered in the same fashion as are City contracts, and to the same standards of oversight.

**Requirements Of UC/ETF
Grant Were Completed**

Measures used to judge satisfactory conclusion of a grant include the determination of whether or not the requirements outlined in the grant contract were met and all appropriate funds were received. The UC/ETF grant had several specific requirements. These included:

- Submission of timely reports.
- Participation in two technical meetings.
- Presentation at the final meeting.
- Submission and approval of a Final Report.
- Expenditures had to conform to grant and federal requirements.

During our audit, we reviewed quarterly status reports and interviewed remaining City and UC staff responsible for overseeing the grant. Based on this fieldwork, we concluded that the required periodic reports, with appropriate supporting details, were provided to the grantor. We also determined that staff attended the required technical sessions, and demonstrated a prototype system at the final UC meeting. A year and seven months elapsed between submission of the initial Final Report and a revised Final Report, but IS staff did follow through and submit a Final Report that was accepted by UC in September 1998.

Expenditure reports were submitted, and the City has received the total amount of grant funds. We did identify instances in which we believe that expenditures did not conform to grant or federal requirements, and instances in which required supporting documentation was not maintained. These issues will be discussed in a following section related to internal controls.

**Controls Should Be Structured
To Reasonably Assure
Achievement Of Grant
Deliverables**

Another measure of the successful conclusion of a grant project is the actual outcome from the work. As with any other City program, project management processes such as clearly defined objectives, adequate resources, and periodic evaluation, increase the potential that the project will achieve the desired outcome. We determined that the work funded by the UC grant did not achieve the desired outcome, namely the Sustainable Decision Support System. While a prototype system was developed and demonstrated, the prototype manipulated pre-screened data to achieve a desired result. It was not able to accept and use real-time data to model outcomes, as the proposal stated it would.

Additionally, according to a technical paper written by the CIESIN consultant, the prototype was not compatible with City GIS, or the decision facilitation software tool called "Option Finder" which the City owned. Therefore, the prototype was unsuitable for long-term City use, according to the consultant.

We believe that this result can be attributed to several factors. First, based on interviews with IS staff responsible for completing the final project report, we believe that the grant was solicited with a scope of work which discussed a broad concept. Basically, more was promised than could be delivered. Second, two AT staff members' salary charges consumed most of the \$74,200 UC funds. We believe, based upon interviews and reviews of staff resumes, that these staff did not have the technical expertise to contribute directly to desired products. Their salary charges depleted resources that could have been spent to acquire needed experts. Last, our fieldwork found no indication that IS management reviewed project reports or evaluated documentation. These factors are discussed below.

***Project Scope Of Work
And Budget Should Be
Well Thought Out***

The proposal submitted for the UC/ETF grant included development of software and a presentation system, for a fully interactive decision support system, and identification of sustainability criteria to measure progress. As with any development project, whether a computer application or building construction, design specifications, project management, and the project budget need to fit within the timeframe necessary for completion.

During our work, we could not locate system design specifications, or a project budget other than the summaries included with the grant proposal. The budget submitted with the proposal did not provide specific information about the source of the additional \$611,000 anticipated to be needed to complete the project. Additionally, the project budget did not undergo the normal City budget evaluation and prioritization process, so that City resources that would be needed during and beyond the grant's life could be considered and allocated.

Even though IS staff characterized the project as technically complex and innovative, we could not locate a documented plan outlining the milestones and tasks necessary to ensure that the project was completed within the fifteen months allowed. According to Purchasing records, AT staff had determined that there was no commercially available group

decision software that would integrate with the City's GIS. In addition, according to the Final Report, technology related to the use of remote-sensed data as input for GIS was in its "infancy." Even now, five years after the initial proposal, IS staff remain unsure whether it will be possible to obtain remote-sensed data in a format that the City can use.

***Project Staff Should Be
Technically Competent
And Their Time
Appropriately Tracked***

The decision support system project required development of specific software and mathematical models, items requiring skilled human resources for completion. The UC budget reflected this need, with \$55,000 of the \$74,200 budget devoted to staff salaries. The salaries charged were for the Project Director, a Project Manager, and a Staff Manager (administrative secretary). We reviewed the qualifications of the Project Director and the Project Manager, and neither appeared to possess the appropriate technical expertise.

Additional funds spent also did not contribute directly to the promised system. A consultant under contract to demonstrate a prototype of the system at a UC meeting was paid \$8,000 of UC funds, which, with staff salaries, used a total \$63,000 of the budget, or 85 percent. The prototype was not intended to be a workable system.

Overall, almost 60 percent of the total \$685,000 decision support system project funds were shown as allocated to salaries on the summary budget contained in the proposal. Because other work was not tracked and reported as related to the UC project, we were unable to determine if other staff or contract resources were used to fulfill the obligations of the grant. According to the Administrative Officer, IS hired a specialist with expertise in the classification and use of images. The specialist was paid with NASA grant funds to complete part of the work necessary for the UC grant. This relationship was not documented, and the cost associated with the specialist was not reported on expenditure reports submitted to UC.

We also found that documentation of staff time dedicated to the project was not maintained. These documents were required in grant specifications as a means of providing written evidence in support of the request for reimbursement of salaries. According to vouchers submitted for reimbursement, \$25,000 in salary charges was submitted for reimbursement for a project manager, who apparently did not work on the project after February 1995. We could not locate documentation related to other staff who may have worked on the project after the re-assignment of the project manager.

***Management Should
Adequately Oversee Projects***

Based on document reviews and staff interviews, we determined that a system of periodic grant progress reviews, independent of AT management, was not in place. Further, there is no indication that the grantor itself closely monitored project results. For example, UC/ETF reimbursed expenses before receiving evidence of the deliverables having been accomplished. As a result, procedures that could have identified the likelihood of non-delivery of the system early in the project life were not in place. With early detection of problems, the project could have been redirected, or closed, and resources reprogrammed to other areas.

Adequate management oversight is difficult to measure in situations with employees in a position of trust. The Project Director was considered a member of the City's executive team, and was given signature authority equal to upper management. Because of his trusted status, oversight was limited. During the course of the grant, other City executives worked to increase oversight of the AT program. Ultimately, the conflict in level of oversight led to a determination to restructure the program.

***Internal Controls Should Be
Adequate To Reasonably
Assure Expenditures Conform
To Requirements***

Grants present unique considerations in funds administration. Grantor administrative requirements may add additional restrictions to the customary ones governing other City funds. Because of grant penalties, including repayment of funds, restrictions should be carefully observed so that the appropriateness of the expenditure cannot be questioned. Documented procedures should establish methods by which accountability for grant-funded assets and expenses will be achieved. As well, duties should be segregated, so that no one individual has complete control over any function. Procedures should also incorporate standard City requirements that must be met, such as inventorying fixed assets, and complying with the Purchasing Code or relevant Administrative Guidelines. Any staff assigned to a grant project should be trained in the appropriate policies and procedures. Management must periodically review documentation to ensure that requirements are met.

Based on document reviews and interviews with City employees familiar with the project, we believe that AT controls, which at the time were limited, contributed to noncompliance. Our fieldwork found instances in which project staff did not adhere to grant requirements governing the use of funds. We also found instances where City administrative requirements were not followed. There is no indication that procedures were in place that would have detected and corrected these errors. Overall, our conclusion, based on review of documentation, is that

expenditures submitted to UC/ETF appear to have been structured to match the funding available, not necessarily to reflect actual expenditures necessary to carry out the activities of the grant.

***Expenditures Should Conform
To Grantor Requirements***

The UC grant required formal accounting records to substantiate propriety, nature, and extent of services provided. Travel costs charged to the grant needed to be appropriately justified and documented. Grant restrictions required that staff make their best effort to ensure that travel was reasonable and prudent. Reasons for variations in planned expenditures needed to be documented. Other types of expenses needed to be documented with sufficient explanation regarding their relationship to the grant. Costs of staff charged to the grant had to be supported with a time-keeping system, which accurately tracked time spent on the project, and any joint costs allocated to the project needed to be supported by a cost allocation plan. Pre-planned cost allocation was especially important because, according to UC grant requirements, expenses that exceeded the approved UC budget could not be shifted for payment to another federal grant. The decision support system involved joint UC, NASA, and City funds.

While requests for reimbursement were submitted to UC with detail regarding the type of expense, the total amount, and the amount requested for reimbursement, we could not locate appropriate records to adequately support expenditures. For example, the relationship of travel expense to the grant was not supported. Travel documents did not indicate the reasons for travel or for using grant funds. Additionally, when travel arrangements were made on short notice (less than seven days in advance), there was no explanation of the need for urgent travel. AT did not maintain records of actual staff time spent on different projects.

Other expenditures not only were not supported, but also appeared to be made in conflict with UC grant requirements or City guidelines. For expenditures that deviated from the grant budget, we could find no documentation that indicated that the deviations were discussed with the grantor. We found that there was limited review and segregation of duties in UC grant administration. The AT Project Director incurred and approved expenditures, and submitted documentation. Details are discussed in the following sections.

Travel Should Be Necessary, Grant Related, and Well Planned. During our review, we found that travel charged to the grant did not contain evidence of the need, or the relationship to the grant. Additionally, there was an appearance that travel arrangements were not planned to avoid incurring additional costs. For example, airline tickets for two trips were purchased within three days of departure, without documentation of either an urgent need or a lack of advance notice. UC grant requirements, as well as federal and City guidelines, require that any travel be necessary, reasonable, and prudent to ensure that funds are spent in the most efficient and effective manner. Because last-minute booking generally results in more expensive airfare, this is one of the specific items to avoid.

Further, more people were sent on trips than had been budgeted originally, but documentation did not support the need for multiple staff to travel to the same meeting. While the UC grant provided for the Project Director and Manager to attend two UC meetings, three staff attended the one UC meeting we could locate documentation for. Other travel (Washington, DC) outlined in the grant budget was used to send two staff on one trip to Washington, instead of one staff person on two trips, as outlined in the budget.

Because the grant capped funds available for required travel, when expenditures exceeded the limit, additional City or other grant funds had to be used to make up the difference. These excess costs were not tracked and reported as expenses related to the grant. Based on available documentation, the expenses associated with the three trips shown in the Insert below required additional funding of over \$3,000.

Trip	Documented Cost	UC Reimbursement	Costs Absorbed by Other Programs
Burlington, Vermont ¹	\$ 1,767	\$ 800	\$ 967
Washington, DC	\$ 3,956	\$ 2,000	\$ 1,956
San Antonio, Texas	\$ 1,890	\$ 1,575	\$ 315
TOTAL	\$ 7,613	\$ 4,375	\$ 3,238
Note ¹ These amounts do not include an \$800 reimbursement or a claimed \$1,384 airfare for which we could not find an airline ticket invoice.			
SOURCE: UC grant reimbursement voucher and AT documents.			

The UC grant travel budget was exhausted by the \$2,000 reimbursement for the Washington, DC trip, for which airfare alone cost \$2,478, due to the last-minute flight arrangements. In addition, we found that the former project manager exchanged his return ticket for other travel arrangements. The reason for the change was not documented, nor was documentation available that evidenced whether or not any funds remained after the exchange. While the budget stated that two trips to Washington, DC would be made, only one trip was documented in UC records. If the second trip was made, it was charged to another program.

Other travel also did not have the appropriate documentation. For example, expenses submitted for a UC meeting in Burlington, Vermont, indicated that both the Project Manager and Project Director attended. We found that documentation for one airline ticket was used to support the expense request for both fares. During interviews with the Project Manager, we were told that the Project Director, former project manager, and the Project Manager attended the meeting. We could not find a request for reimbursement of any expenses related to hotel or meals for either project manager. We could only find invoices for the airplane ticket and a hotel stay charged to the purchasing card issued to the Project Director. As a result, we could not determine whether the City was inappropriately reimbursed for travel that did not occur, or whether costs of travel were absorbed by other programs.

Documentation Should Show Relationship To The Grant. During our review of expenditure reimbursement requests, we noted \$1,508 was included for the rental of a projector used during a two-day presentation at a National League of Cities conference held in Scottsdale, in November 1995. *Presentation at this conference was not a requirement under the UC grant*, and there was no documentation of the relationship of the expense to the grant. In addition, we found that other City resources paid half of the cost of renting the projector. As a result, even if the expenditure was appropriate, the reimbursement request was overstated by \$786.

Funds Should Be Expended As Authorized, Or Approval Obtained For Changes. The UC grant stated that purchase or rental of capital equipment was allowed only with the specific prior approval of the grantor. UC grant rules required that a grantor's equity in an asset be refunded when assets acquired with grant funds are used for purposes not authorized by the grantor agency. This pre-supposes an inventory tagging and tracking process. The grant also required a cost allocation plan to methodically allocate joint project costs.

When we evaluated project documentation, we found that funds authorized in the UC grant budget for equipment rental were not spent for the stated purpose. In addition, we noted that the reimbursement request stated that the expense was for equipment rental when, in fact, the expenditure was a purchase of a computer. No cost allocation plan was prepared to methodically apportion expenses to each fund source.

Through this process, the UC grant paid approximately \$4,500 toward the purchase of a \$14,500 stand-alone computer, instead of the authorized costs of renting a laptop computer and overhead projector. We could not find documentation that indicated that the grantor approved the change, or the use of shared resources. The AT Project Manager initiated the equipment purchase, and the Project Director approved the voucher sent to the UC administrator. No one independent of the project reviewed the voucher to identify the erroneous claim.

Further, we determined during fieldwork that the equipment is not being used for the purpose for which it was purchased, nor is it used for any grant-related purpose. We also determined that the item is not on the City's computer inventory records, nor is it marked with any identification number or tag that would relate it to a grant purchase. The expenditure reimbursement did not include documentation of the use of other grant funds to supplement the equipment purchase. The lack of a cost allocation plan for UC funds creates questions regarding whether the costs were shifted for payment to another federal grant.

Since we performed fieldwork, IS staff has inventoried and tagged the computer equipment, and contacted the grantor regarding the continued use of the equipment.

Salary Charged Should Be Supported With Appropriate Time Distribution Records. The UC grant required that staff salaries charged to the grant had to be supported by appropriate time distribution records. Documents reviewed during the audit, and interviews with IS staff, indicate that no internal procedures existed to accurately track hours, with the result that accurate time distribution records do not exist. We reviewed City standard bi-weekly payroll forms for AT staff to evaluate whether they provided support for charges. Forms that we reviewed contained inaccurate project time charges when we compared them to staff travel records.

***Oversight Should Ensure That
City Requirements Are Followed***

In addition to expenditures that did not conform to grant requirements, we also identified instances of non-compliance with City procedures. The computer equipment purchase, discussed above, did not comply with the City Purchasing Code for competition. In 1995, the Code required that equipment purchases of \$10,000 or over should be advertised for competitive formal bid. The computer equipment purchased exceeded this limit, but was not competitively bid. Instead, the equipment was purchased as a sole source award.

According to Purchasing records, AT staff justified the purchase as a sole source by asserting that it would be more effective to purchase the equipment through a vendor capable of providing consulting services. However, the contract for the consulting services was not approved by City Council until July 1995. Because the computer equipment was purchased in May 1995, we concluded that it was a separate transaction, and not tied to the professional services. The contract approved by City Council did not include the equipment purchase. While the Council Action Report discussed \$10,000 (not \$14,500) intended to be spent with the vendor for equipment, it did not mention that the equipment already had been purchased.

While reviewing the travel costs associated with this grant, we noticed instances in which staff charged the City for more expenses than were appropriate, and as a result, received more money than was justified. For example, project staff travel reconciliations requested reimbursement for more mileage than the number of miles between the office and the airport accounted for. No reason for the excess mileage was documented. We also found evidence that the City paid for meals charged to a City credit card or a hotel room, and also paid the full per diem for a travel day. Through these misstatements, employees received reimbursement for expenses not incurred.

RECOMMENDATIONS

To ensure that the problems experienced with the UC grant project do not recur in other grants administered by IS, we recommend that the Chief Information Officer:

Direct development of IS policies and procedures which incorporate the City guideline, related requirements such as the Purchasing Code, and the following project management procedures:

- Allocation of resources to specific work products.
- Identification of staff qualifications needed.
- Development of staff time tracking methods.
- Inventory procedures to identify and track capital equipment purchased with grant funds.
- Establishment of periodic independent assessments of grant results and costs.

ABBREVIATED RESPONSES

The Chief Information Officer responded that he concurred with the recommendation:

IS will immediately and formally adopt the guideline for grants. For all grant related projects, IS will ensure that resources are allocated for specific work products; staff qualifications meet requirements; staff time is tracked; and inventory procedures for capital equipment purchased with grant funds are followed.

APPENDIX

Administration of a Decision Support System Grant from the Urban Consortium
City Auditor Report No. 9802A

A

Objectives, Scope, And Methodology

The objective of our audit of AT grants is to determine whether or not AT staff complied with the terms and conditions of grants, and projects satisfactorily fulfilled the grants' objectives. As well, work is intended to formulate suggestions to IS management about improvements, which could strengthen internal controls over grant administration. Reports related to each grant will be prepared as fieldwork is completed. The first grant audited was the UC/ETF grant.

Fieldwork on the UC/ETF grant was initiated in October and concluded in November 1998. Audit scope included the products, activities, and transactions that took place during the period that the grant was active, from October 1, 1994, to December 31, 1995. Audit work was conducted in accordance with generally accepted government auditing standards as they relate to expanded scope auditing in a local government environment and as required by Article III SRC § 2-117 *et. seq.*, except that the Office currently does not comply with the requirement regarding peer review frequency.

We obtained copies of the grant contract and exhibits to determine the grant requirements. We evaluated whether grant requirements were complied with through independent analysis of available documentation. IS staff furnished documentation related to the UC grant, which was retained in their office. As well, we independently obtained documentation related to grant transactions from Accounts Payable, Financial Services, and from airline carriers. We were unable to obtain documentation for certain transactions due to the age of the UC grant project. Documents had been destroyed by the airlines. We also verified whether transactions complied with the grant and with City requirements.

We interviewed IS staff regarding the internal control structure related to the UC/ETF grant and whether or not the objectives of the grant were achieved. We also interviewed Purchasing staff, and obtained official copies of subcontracts for services and equipment paid for with grant funds. We evaluated whether or not documentation evidenced compliance with the City Purchasing Code. We interviewed the UC/ETF business officer, and obtained copies of documents retained by that office. We consulted with City Attorney staff regarding the legal requirements for contract award.


APPENDIX

Administration of a Decision Support System Grant from the Urban Consortium
City Auditor Report No. 9802A

B

Management Response

March 19, 1999

TO: Cheryl Barcala, City Auditor
FROM: Carder Hunt, Chief Information Officer 

RE: Management Response to Audit Report #9802A

Recommendation: "... recommend that the Chief Information Officer:

Direct development of IS policies and procedures which incorporate the City guideline, related requirements such as the purchasing code, and the following project management procedures:

- Allocation of resources to specific work products,
- Identification of staff qualifications needed,
- Development of staff time tracking methods,
- Inventory procedures to identify and track capital equipment purchased with grant funds, and
- Establishment of periodic independent assessments of grant results and costs."

Management response: we concur.

Discussion: the Administrative Officer for IS is responsible for assuring that all purchases and acquisitions are in full compliance with the city's purchasing code. IS is already following the City guideline for grants developed by Financial Services, but will immediately and formally "adopt" that city guideline, in order for it to be explicitly clear.

Project management, in general, is a high priority skill set for this Department. Specifically, we will ensure-- for all grant related projects -- that: resources are allocated for specific work products; staff qualifications meet work product requirements; staff time is tracked by work product; and inventory procedures for capital equipment purchased with grant funds are followed. We will work with the city auditor's office to establish independent assessments of grant results and costs.


Carder Hunt, Chief Information Officer

CC: Barbara Burns, Ass't City Manager
Mark Ledbetter, Director, Spatial Technologies
Jennifer Jensen, Administrative Officer